

Green Materials 101

Using Resources within
King County



King County Building Summit:
Dollars and Sense Tools to Green Your Project

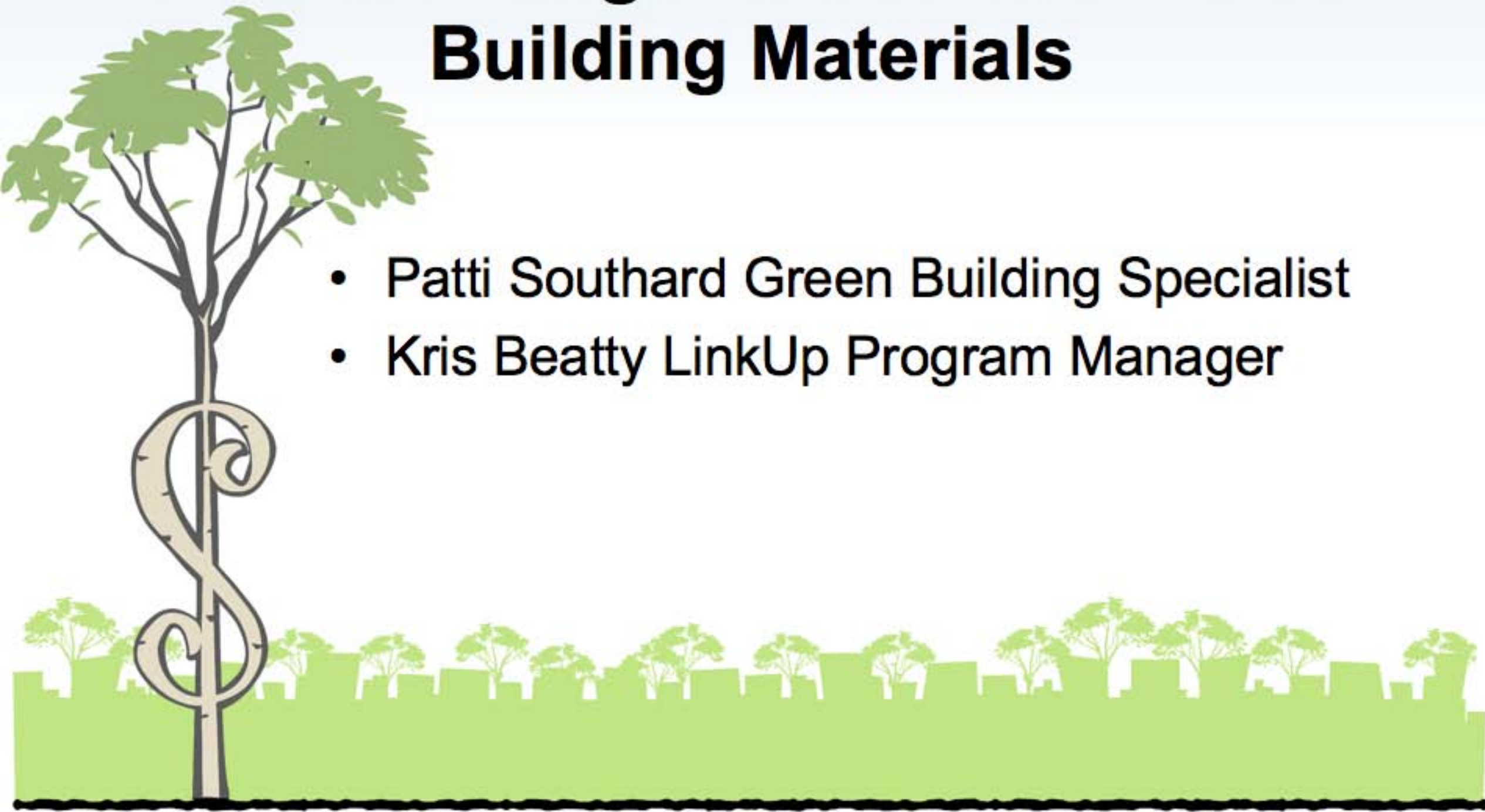


King County

Solid Waste Division

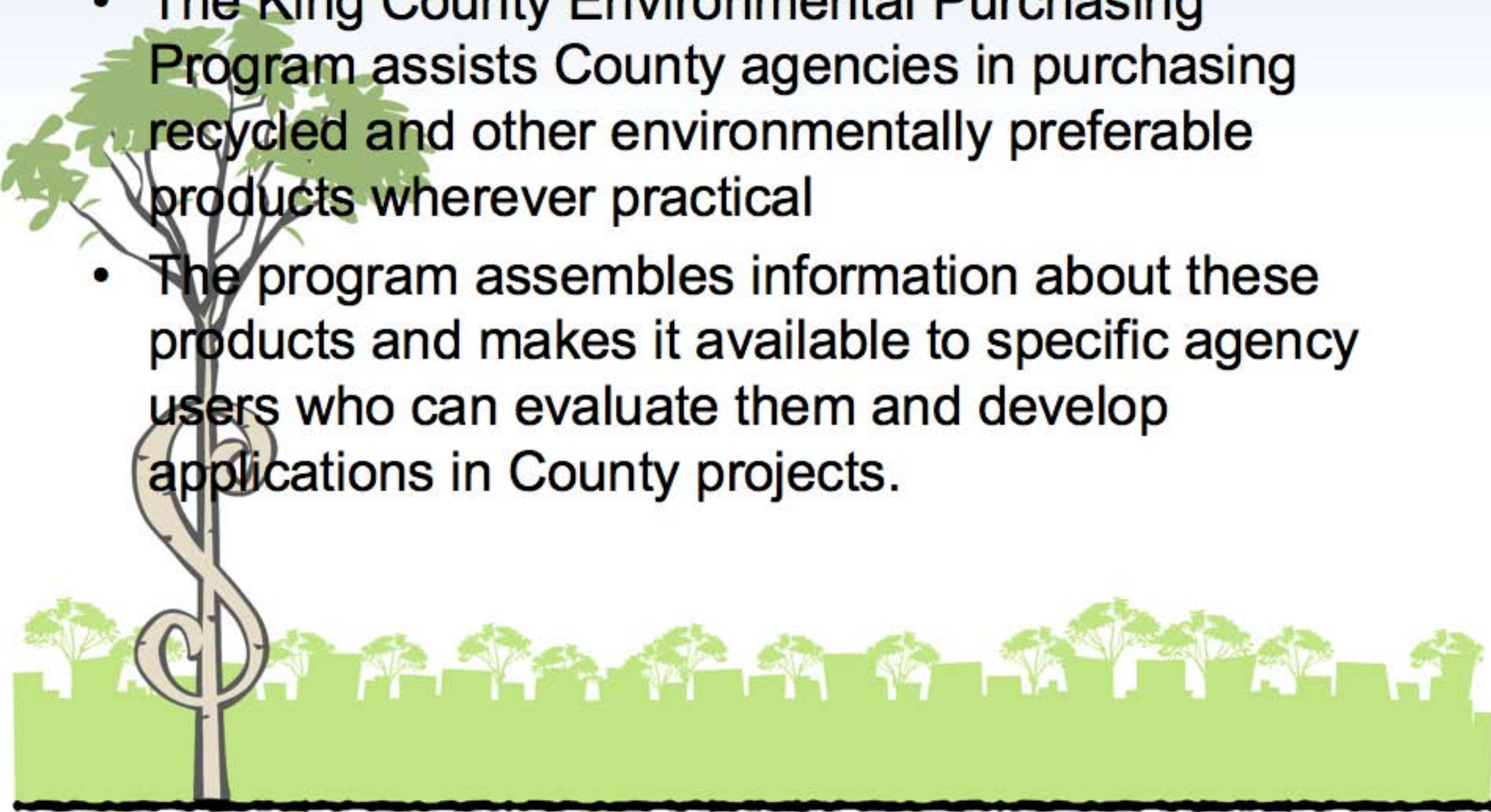
Your LEEDing Resource for Green Building Materials

- Patti Southard Green Building Specialist
- Kris Beatty LinkUp Program Manager



Environmental Purchasing Program

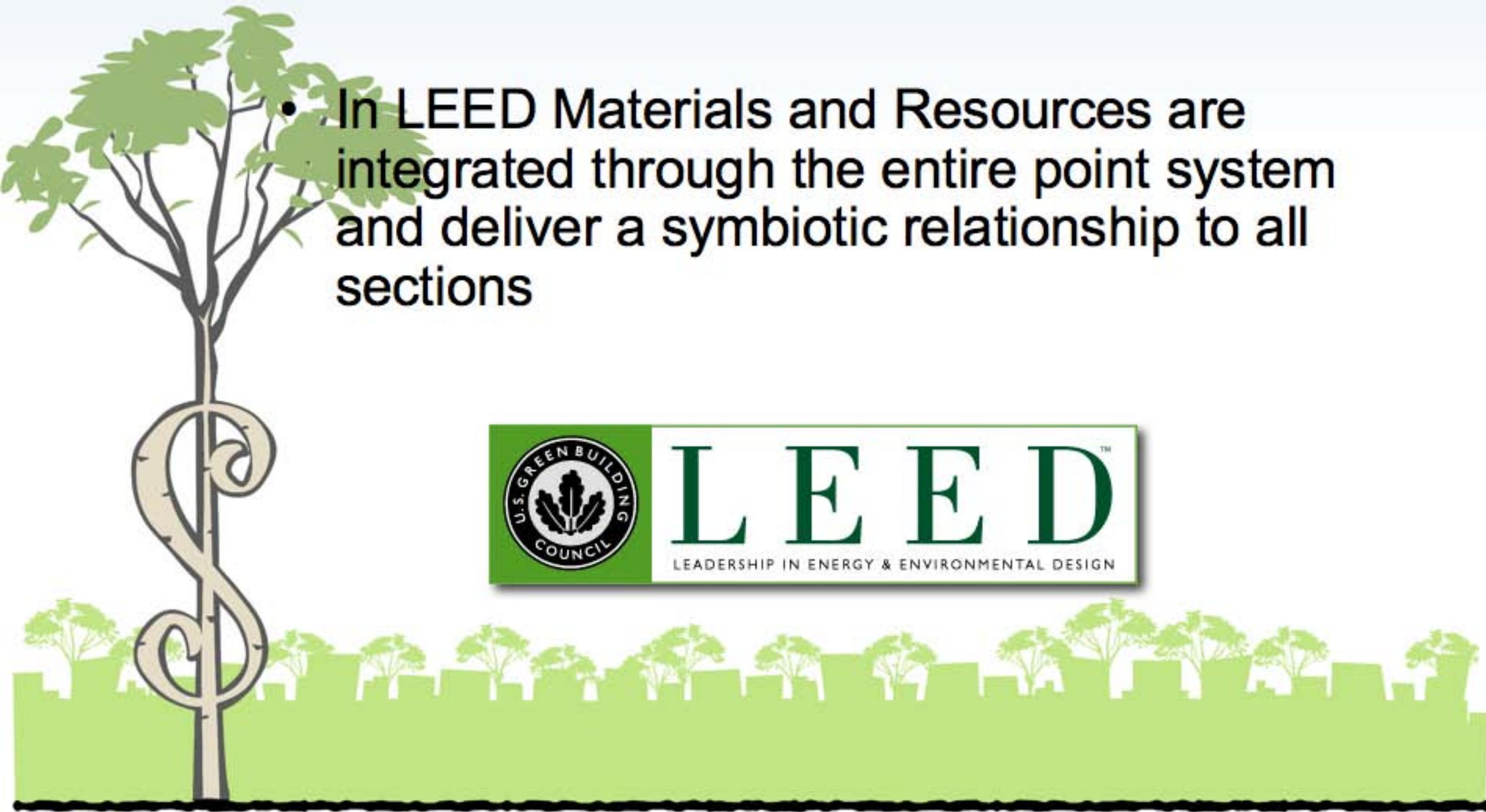
- The King County Environmental Purchasing Program assists County agencies in purchasing recycled and other environmentally preferable products wherever practical
- The program assembles information about these products and makes it available to specific agency users who can evaluate them and develop applications in County projects.



Materials and Resources

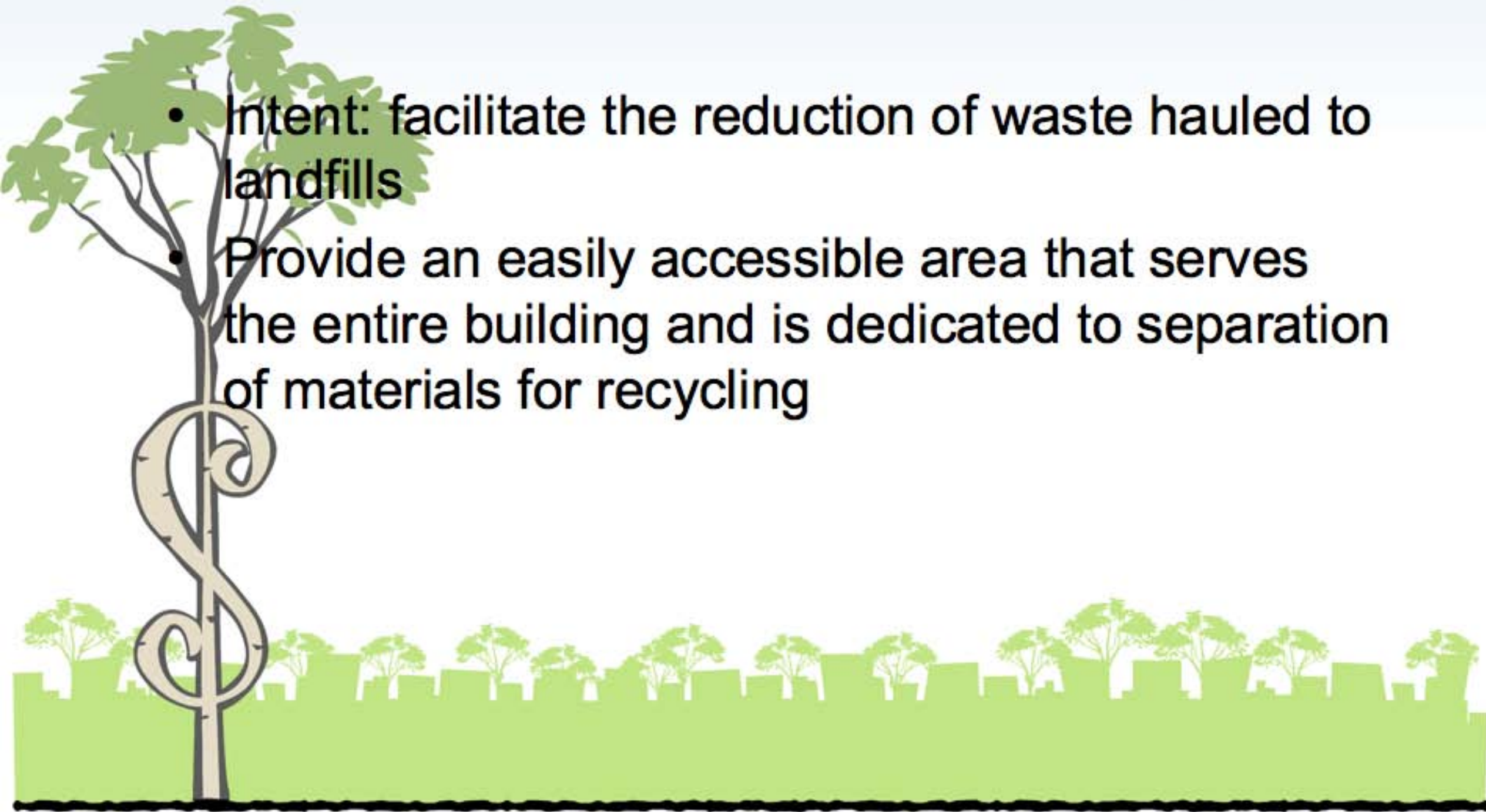
MR 1-7

- In LEED Materials and Resources are integrated through the entire point system and deliver a symbiotic relationship to all sections



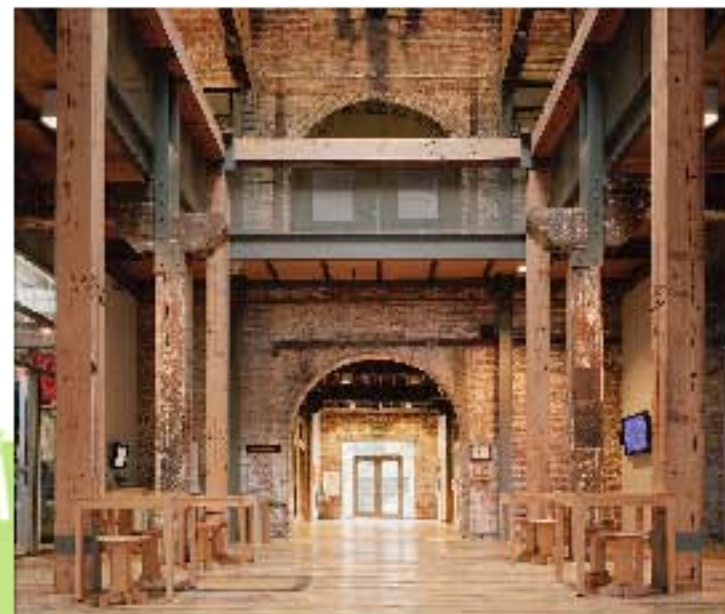
Storage and Collection of Recyclables MR Credit Prerequisite

- Intent: facilitate the reduction of waste hauled to landfills
- Provide an easily accessible area that serves the entire building and is dedicated to separation of materials for recycling



Building Reuse

- MR Credit 1.1 1.2 1.3 (potential of 3 points)
- Maintain existing walls, floors and roof
- Requirement for 1.1 maintain at least 75% of existing building structure
- 1.2 maintain an additional 25%
- 1.3 100% plus 50% of non shell areas



Construction Waste Management

- MR Credit 2.1
- Divert 50% of Construction and Demolition and Land clearing from landfill disposal

- King Street Center Case study:

3,351 tons of decontaminated topsoil

668 tons of granite (reused by the Port of Seattle)

44 tons of steel

50 cubic yards of shotcrete

1 ton of railroad ties

8 tons of wood

4,832 tons of concrete and 150 cubic yards of masonry

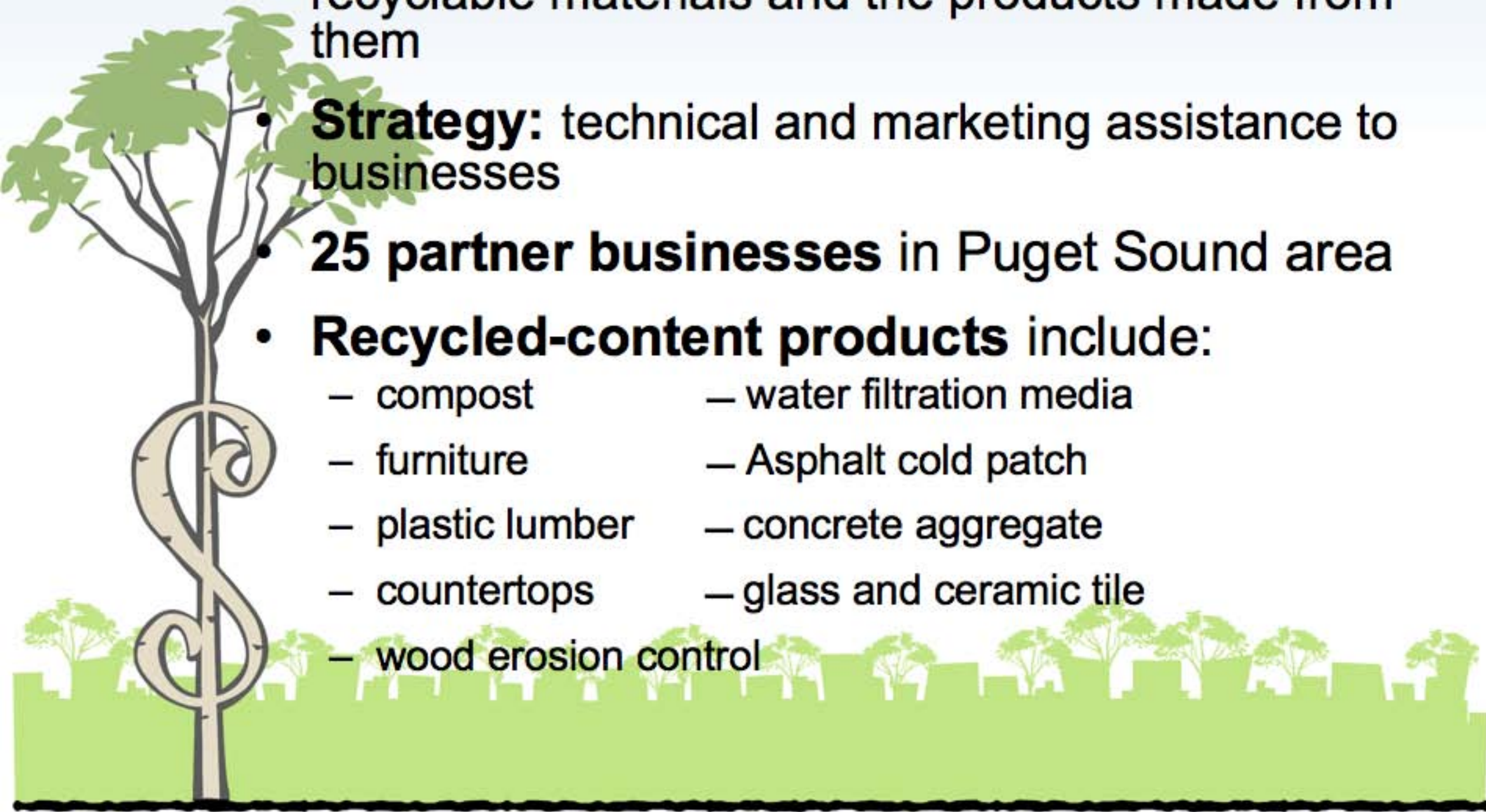


Resource Reuse

- MR Credit 3.1 and 3.2
- Reuse Building Materials and Products
 - timbers, beams, windows, doors, furnishings
- Reduces demand for virgin materials
- Reduces impacts associated with extraction



- **Goal:** Develop markets for reusable items and recyclable materials and the products made from them
- **Strategy:** technical and marketing assistance to businesses
- **25 partner businesses** in Puget Sound area
- **Recycled-content products** include:
 - compost
 - furniture
 - plastic lumber
 - countertops
 - wood erosion control
 - water filtration media
 - Asphalt cold patch
 - concrete aggregate
 - glass and ceramic tile



Recycled Content

- **MR Credits 4.1 and 4.2**

- **Intent:** Reduce impacts from using virgin materials and solid waste volumes

- **FTC definitions** – post-industrial and post-consumer recycled content

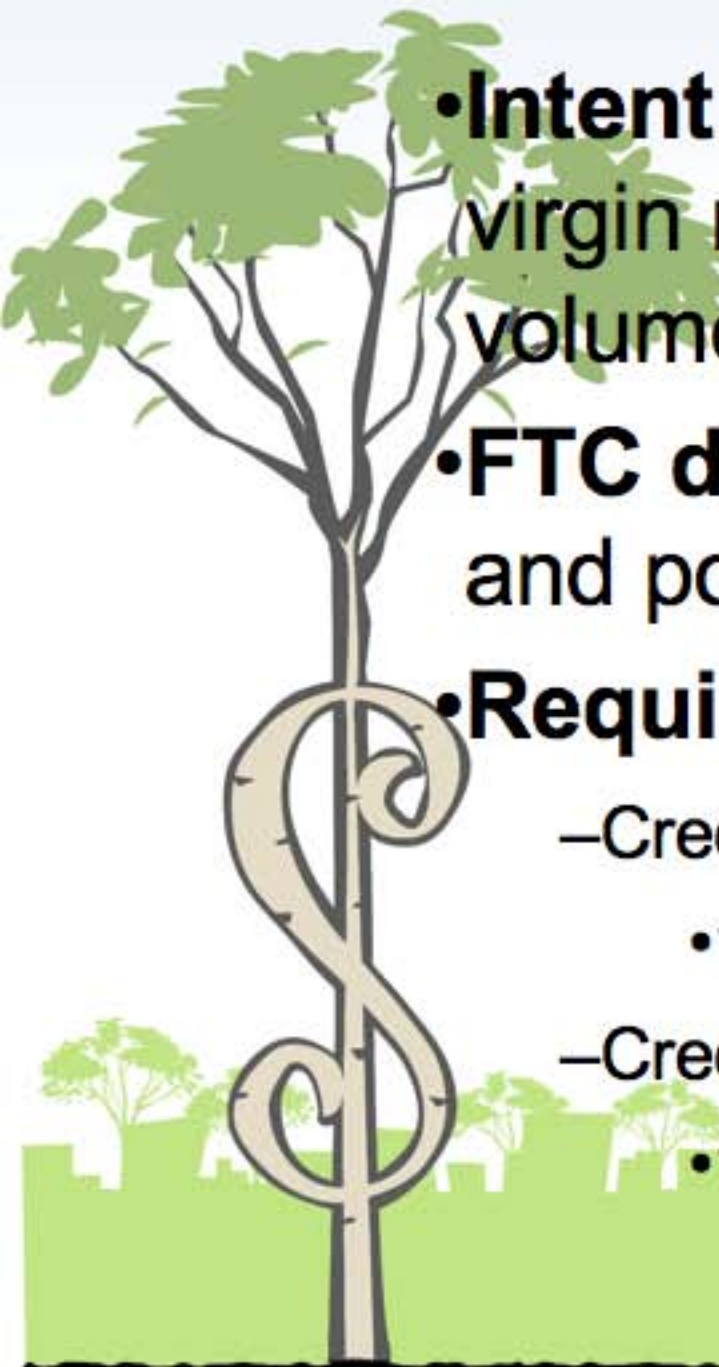
- **Requirements**

- Credit 4.1 - 5% of total value of materials

- 1 point

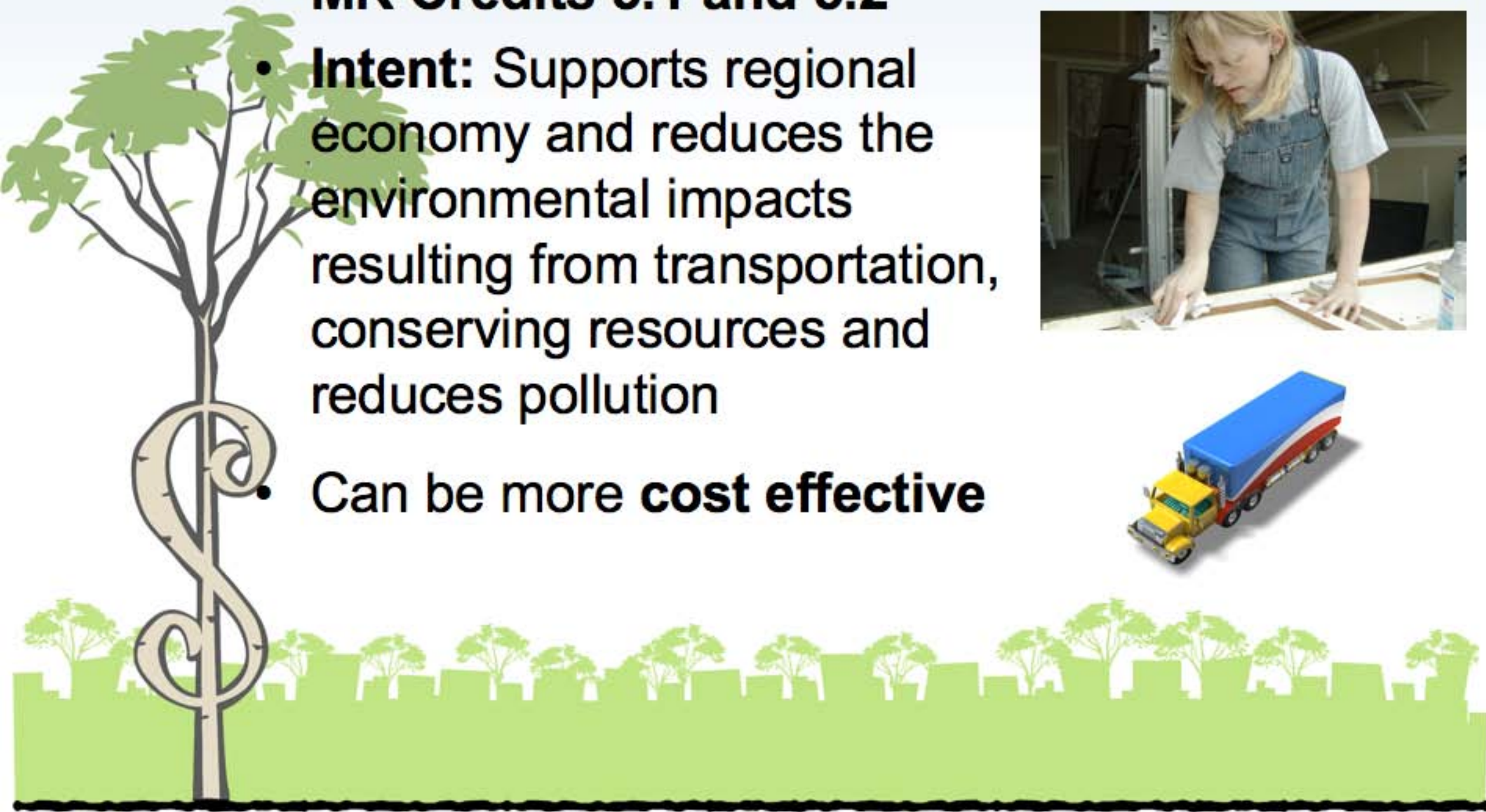
- Credit 4.2 – 10% of total value of materials

- 1 point in addition to 4.1



Regional Materials

- **MR Credits 5.1 and 5.2**
- **Intent:** Supports regional economy and reduces the environmental impacts resulting from transportation, conserving resources and reduces pollution
- Can be more **cost effective**



Regional Materials

- **Requirements**

- **Credit 5.1** – minimum 20% of building materials and products that are manufactured regionally within 500 mile radius

- 1 point

- **Credit 5.2** - Of regionally manufactured materials for credit 5.1, a minimum of 50% extracted regionally

- 1 point in addition to 5.1



Rapidly Renewable Materials

- MR Credit 6
- 5% of the total value of all building materials
- Reduce the use and depletion of finite raw materials
- Materials made from plants that are typically harvested within a 10 year life cycle



Rapidly Renewable Materials

- Products include
 - **Flooring**
cork, bamboo, sisal
 - **Interior Surfaces**
vinyl free wall
paper, composite
furniture
 - **Plant Based
Finishes**
furniture grade, floor
and wall coatings



Certified Wood

- MR Credit 7
- Certification from Forest Stewardship Council “FSC”
- 1 credit for 50% total cost of wood based materials and products



Certified Wood can also be integrated in MR Credits 5 & 6

